

CLAIMS

What is claimed is:

1. A method of displaying a video image, the method comprising:
impinging a beam on a portion of a reflective surface of a light modulator,
5 the beam having a wavelength suitable for displaying a video image, and wherein
the reflective surface comprises an aluminum alloy.
2. The method of claim 1 wherein the aluminum alloy comprises aluminum
and copper, and wherein the copper is greater than about 0.5% of the aluminum alloy.
3. The method of claim 1 wherein the wavelength is between about 400nm
10 and about 700nm.
4. The method of claim 1 wherein the beam comprises a laser beam having
a power density greater than about $3\text{kW}/\text{cm}^2$.
5. The method of claim 1 wherein the aluminum alloy comprises aluminum
and copper.
- 15 6. The method of claim 1 wherein the aluminum alloy comprises aluminum
and titanium.
7. The method of claim 1 wherein the light modulator comprises a plurality of
deflectable ribbons.
8. A system for displaying a video image, the system comprising:

an array of ribbon light modulators having a reflective surface configured to reflect or diffract a beam to display a video image, and wherein the reflective surface comprises an aluminum alloy.

9. The system of claim 8 wherein the aluminum alloy comprises aluminum and copper, and wherein the copper is greater than about 0.5% of the aluminum alloy.

10. The system of claim 8 wherein the beam has a wavelength between about 400nm and about 700nm.

11. The system of claim 8 wherein the beam comprises a laser beam having a power density greater than about $3\text{kW}/\text{cm}^2$.

12. The system of claim 8 wherein the aluminum alloy comprises aluminum and copper.

13. The system of claim 8 wherein the aluminum alloy comprises aluminum and titanium.

14. A method of displaying a video image, the method comprising:

impinging a first beam on a portion of a reflective surface of a light modulator, the reflective surface comprising an aluminum alloy; and

projecting the first beam on a screen to display a first color of a multi-color video image.

15. The method of claim 14 further comprising:

impinging a second beam on the reflective surface; and

projecting the second beam on the screen to display a second color of the video image.

16. The method of claim 15 wherein the first beam has a wavelength that results in the first color being red.

5 17. The method of claim 15 wherein the first beam has a wavelength that results in the first color being green.

18. The method of claim 15 wherein the first beam has a wavelength that results in the first color being blue.

10 19. The method of claim 15 wherein the aluminum alloy comprises aluminum and copper, and wherein the copper comprises greater than about 0.5% of the aluminum alloy.

20. The method of claim 15 wherein the aluminum alloy comprises aluminum and an alloying element selected from a group consisting of titanium and hafnium.